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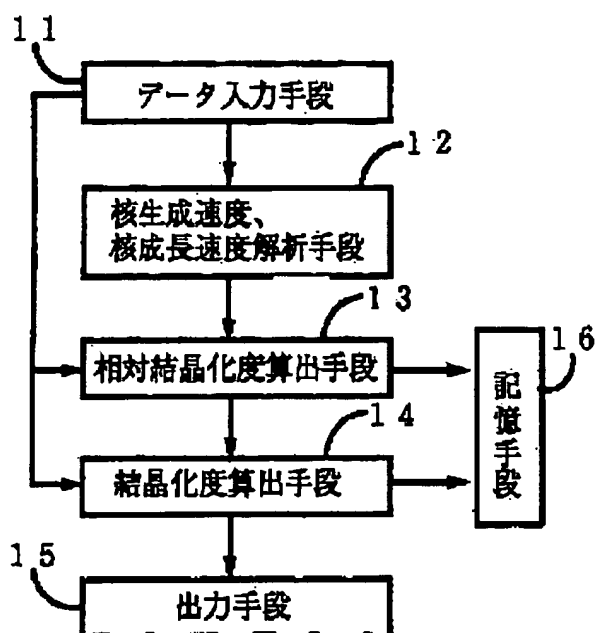PUBLICATION DATE : 26-05-98

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APPLICATION NUMBER : 09245697

APPLICANT : TORAY IND INC;

INVENTOR : HIRATSUKA MOTONORI;

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TITLE : METHOD AND APPARATUS FOR CRYSTALLIZING PROCESS SIMULATION IN CRYSTALLINE RESIN MOLDED PRODUCT

ABSTRACT : PROBLEM TO BE SOLVED: To estimate a change in the degrees of crystallization with the elapse of time at a time of molding by estimating a relative degree of crystallization at an arbitrary point of time in a molding process and estimating the degree of crystallization at the arbitrary point of time on the basis of an arrival degree of crystallization and the relative degree of crystallization at each time.

SOLUTION: The input of various data necessary for analysis is performed by an input means 11. A nucleus forming speed and nucleus growing speed analyzing means 12 inputs the output of the input means 11 to calculate a nucleus forming speed and a nucleus growing speed at a time of molding. A relative degree-of- crystallization calculation means 13 inputs the outputs of the input means 11 and the analizing means 12 to substitute the nucleus forming speed and the nucleus growing speed for Avramic formula to estimate the relative degree of crystallization or spherulite size distribution. Further, a degree-of-crystallization calculation means 14 inputs the outputs of the input means 11 and the calculation means 13 and uses an arrival degree of crystallization at each temp. to estimate a change of a degree of crystallization at a time of molding with the elapse of time. The output of the calculation means 14 is stored in a memory means 16 and also displayed on an output means 15 by a figure.